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July 14, 2015

Sallie Diebolt Chief, Arizona Branch
Department of the Army
Los Angeles District, Corps of Engineers
Arizona-Nevada Area Office
3636 North Central Avenue, Suite 900
Phoenix, Arizona 85012-1939

RE: Endangered Species Act Consultation on the Department of the Army Permit for
Whetstone Ranch as it relates to the Villages at Vigneto, Cochise County, Arizona
(Permit Number 2003-00826-SDM)

Dear Ms. Diebolt:

We have become aware of a large residential development (28,000 dwelling units on approximately 12,324 acres, with associated commercial and recreational facilities) entitled The Villages at Vigneto, proposed to be constructed in the area partially covered by a Department of the Army Permit (Permit Number 2003-00826-SDM) signed on June 21, 2006. The 2006 permit authorized the discharge of dredged and/or fill material into 51 acres of waters of the United States and around unnamed washes in Sections 31, 32, and 33, Township 17 South, Range 20 East; and Sections 3, 4, 5, 6, 7, 8, 9, 10, 15, 16, 17, and 18, Township 18 South, Range 20 East, in Benson, Cochise County, Arizona. The discharges were permitted in order to develop the approximately 8,200-acre Whetstone Ranch as a master-planned community that was to include residential and commercial land uses, and associated stormwater management facilities, roadways, utilities, and recreational amenities. We have no records of interagency consultation pursuant to section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, *et seq.*) (Act) for the Villages at Vigneto. We do note, however, that the May 17, 2004, Public Notice for the previously-proposed Whetstone Ranch included a preliminary determination that the action, as proposed at that time, would not affect threatened or endangered species or their critical habitat.

This letter is to alert you, that this project under either the prior Whetstone Ranch or current Villages at Vigneto configuration, may affect two species that have been listed since your previous "no affect" determination; and (2) constitutes our official recommendation that you request interagency consultation on your permit issuance.

Direct EffectsWestern Yellow-billed Cuckoo

The western yellow-billed cuckoo was listed as threatened on October 3, 2014 (79 FR 59992); critical habitat for the species was proposed on August 15, 2014 (79 FR 48548). The upper San Pedro River is occupied by the largest population of yellow-billed cuckoos in Arizona and one of the largest in the western Distinct Population Segment (79 FR 59992). Proposed critical habitat exists along the river adjacent to the area subject to your June 21, 2006, permit. The species has been documented nesting in velvet mesquite (*Prosopis velutina*) woodlands approximately 0.8 kilometer (km) from the San Pedro River near Charleston (M. Halterman, pers. comm. 2015). Cuckoos exhibit large, undefended territories around the nest sites. Home ranges averaged 82 hectares (ha) in a study on the Rio Grande (Sechrist *et al.* 2009) and 51 ha in a study on the upper San Pedro River (Halterman 2009) using the Minimum Convex Polygon method. The species can travel greater than 1.7 km per day or greater than 3 km during the breeding season based on telemetry data (Sechrist *et al.* 2009).

We have examined aerial imagery of the project area and it appears that similarly suitable xeroriparian nesting and foraging habitat exists in the numerous ephemeral channels and portions of the uplands within the project area. Levick *et al.* (2008) includes descriptions of the ecological value of such ephemeral streams as well as information indicating that they are relatively more susceptible to disturbance than perennial streams.

Moreover, yellow-billed cuckoos have been documented breeding in Madrean evergreen woodland adjacent to ephemeral streams in the Patagonia Mountains (WestLand, Inc. 2013a and 2013b). Madrean evergreen woodlands also exist in the Whetstone Mountains immediately west of the project area, making it more likely that yellow-billed cuckoos occur in the intervening habitat between the mountain range and the San Pedro River, which necessarily includes the project area.

Yellow-billed cuckoo habitat exists in and adjacent to the project area and there is a reasonable likelihood that the species occurs on the site. We do not consider the partial avoidance and/or small buffering of ephemeral washes described in the *Habitat Mitigation and Monitoring Plan ACOE File No. 2003-00826-SDM Whetstone Ranch* (Whetstone HMMP) (WestLand 2005) to be sufficient to ensure there are no direct or indirect effects to yellow-billed cuckoo habitat on the development site.

It is for the reasons described above that we have determined that it is reasonably certain that the proposed action may directly affect the yellow-billed cuckoo. We strongly recommend that section 7 consultation be requested by your agency.

Northern Mexican Gartersnake

The northern Mexican gartersnake (*Thamnophis eques megalops*) was listed as threatened on

July 8, 2014 (79 FR 38678); critical habitat was proposed on July 10, 2014 (79 FR 41550). The upper San Pedro River is considered occupied by the species, and proposed critical habitat exists along the river adjacent to the area subject to your June 21, 2006, permit. The species has been documented in semidesert grasslands up to 1 mile (1.6 km) from the nearest known aquatic sites on the Appleton-Whittell Research Ranch in the Babocomari River watershed (J. Servoss pers. comm. 2015). The species' presence in terrestrial habitat may be due, in part, to the presence of thermal cover and hibernacula and/or prey, including reptiles, toads, rodents, and invertebrates. There is a reasonable potential for the species to be present in the project area and/or for its habitat to be indirectly affected (as described in subsequent analyses).

Indirect Effects

We are also concerned with the potential indirect effects of the proposed action. The Act's implementing regulations at 50 CFR §402.02 define the action area to be assessed for potential impacts to listed species or critical habitat as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." Further, the "effects of an action" are defined in 50 CFR §402.02 as "the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action," where interrelated actions are those that are "part of a larger action and depend on the larger action for their justification", and interdependent actions are those that "have no independent utility apart from the action under consideration." The regulations' background narrative (see Page 19932) specifically states that the "but for" test should be used to assess whether an activity is interrelated with or interdependent to the proposed action.

One category of indirect effects pertains to the potentially altered surficial hydrology of the site as it relates to the maintenance of aquatic, xeroriparian, and mesoriparian habitat in downstream areas (see Stromberg *et al.* 1996), including areas occupied by yellow-billed cuckoos and northern Mexican gartersnakes. Levick *et al.* (2006) investigated the potential impact of residential development of Whetstone Ranch - encompassed within the Villages at Vigneto project area – considering a negative impact to be any increase in surface runoff and sediment yield (Kepner *et al.* 2004). Anticipated adverse environmental consequences from such increases may include degraded water quality from sediment and pollutant transport, erosion and alteration of the stream channel, habitat destruction, decreased biological diversity, and increased flooding. The hydrologic modeling results found in Levick *et al.* (2006) indicated that significant increases in both runoff and sediment yield were likely at the San Pedro River main-stem under the Whetstone Ranch development scenario. Given the presence of yellow-billed cuckoos, northern Mexican gartersnakes, and the species' proposed critical habitats in the San Pedro River immediately downstream from the proposed development, we consider that the Whetstone Ranch proposal or the updated Villages at Vigneto proposal may affect these species and again strongly recommend that consultation be requested by your agency. We also note that, should such impacts propagate a sufficient distance downstream, they could also affect endangered southwestern willow flycatchers (*Empidonax traillii extimus*) and critical habitat on the middle and lower reaches of the San Pedro River.

The other category of indirect effects pertains to the withdrawal of groundwater to serve residential and commercial development at the project site. It is likely that an appreciable volume of groundwater will be required to serve the development. If we assume a per capita water demand of 118 gallons (0.132 acre-feet/per day (AFD)) (GUAC, 2006) and two residents per each of the 28,000 dwelling units, we would anticipate at least 7,400 acre feet per annum (AFA) (approximately) would be withdrawn from the groundwater basin. This groundwater pumping would not occur but for the residential development.

Haney and Lombard (2005) provided indirect evidence that the floodplain alluvial aquifer at Three Links Farm, a conservation property on the San Pedro River downstream of Benson, is maintained by interbasin transfer of groundwater from the Benson Area; local mountain-front recharge is of insufficient volume to explain the quantities of alluvial water present at the site. Baseline deficit groundwater pumping was estimated to be 1,300 AFA in 2002 (Arizona Department of Water Resources, personal communication as referenced in Haney and Lombard 2005) in the Benson sub-area of the Upper San Pedro groundwater basin in which the proposed project is situated. If the large groundwater withdrawals required to serve the Villages at Vigneto development curtails this presumed subflow, we anticipate adverse effects to yellow-billed cuckoos (and the cuckoo's proposed critical habitat) as well as southwestern willow flycatchers (and the flycatcher's critical habitat in the middle and potentially lower reaches of the San Pedro River). We again recommend that consultation be requested in order to address these effects to listed species and proposed and final critical habitats.

Effects of Interrelated and Interdependent Actions

We are not aware if the site is currently served by electric lines, though we completed informal consultation for a 65 kilovolt (Kv) power line intended to serve Whetstone Ranch on November 8, 2000 (File Number 22410-2001-I-0018). If this power line is intended solely to serve what is now known as the Villages at Vigneto development, it would lack independent utility. If the power line has not yet been constructed, its effects, if any, should be considered part of the proposed action.

The management of the off-site mitigation lands described in the Whetstone HMMP is inseparable from the development of the project site and is thus an interdependent action the proposed action. We have concerns and recommendations based on implementation of the interdependent HMMP.

Yellow-billed Cuckoo

The maps included within the Whetstone HMMP also display an off-site mitigation parcel adjacent to the San Pedro River. Activities at this parcel represent interrelated actions to the Whetstone Ranch/Villages at Vigneto proposal. The site contains western yellow-billed cuckoo habitat and is at least partially within proposed critical habitat. Various management activities are associated with the mitigation lands, including vegetation management. The Whetstone

HMMP specifically proposes a program to remove saltcedar. Saltcedar, or tamarisk (*Tamarix* spp.) can serve as yellow-billed cuckoo habitat, particularly when interspersed with native xero- and mesoriparian plant species. This control program is not wholly beneficial, as it may affect cuckoos in the short term.

Northern Mexican Gartersnake

We reiterate that the San Pedro River is considered occupied by northern Mexican gartersnakes, and has been proposed as critical habitat for the species. The uplands landward from the river also exhibit a high likelihood of northern Mexican gartersnake occurrence, and management activities may affect the species. We again recommend consultation be requested.

Other New Information

We also note that the project area for the Villages at Vigneto (12,324 acres) is appreciably larger than the area permitted for the Whetstone Ranch (8,200 acres) and thus, in addition to new analyses of effects to yellow-billed cuckoos, northern Mexican gartersnakes (and their proposed critical habitats), any effects to threatened or endangered species or their critical habitats previously analyzed by your agency in support of the June 21, 2006, permit decision should also be reconsidered in light of the larger affected area. These direct and indirect effects include, but are not limited to: (1) potential occurrence of panniculate agaves, the forage resource for the endangered lesser long-nosed bat (*Leptonycteris curasoae yerbabuenae*); and/or (2) the adjacency of the proposed action to designated critical habitat for the jaguar (*Panthera onca*) in the Whetstone Mountains.

It also appears that the appreciably expanded project area and the listings of the yellow-billed cuckoo and northern Mexican gartersnake and their respective proposed critical habitats, constitute significant new information as stated under Item 5(c) under the heading Further Information in your June 21, 2006, Department of the Army Permit. To summarize, Item 5 is entitled Reevaluation of Permit Decision, and states that your "... office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to..." The circumstance stated in Subsection c of Item 5 regards "...[s]ignificant new information surfaces which this office did not consider in reaching the original public interest decision."

Given this new information regarding effects to threatened and endangered species and critical habitat, as well as the appreciable increase in the scale of the project, we request said reevaluation of the permit decision. Moreover, we request notification of the reevaluation (i.e. a revised or new Public Notice) so that we may pursue our authorities under and in accordance with: (1) the Fish and Wildlife Coordination Act (48 Stat. 401, as amended U.S.C. 661 *et seq.*); (2) Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-712 40 Stat. 755, *et seq.*); and/or (3) the 1992 Clean Water Act section 404(q) Memorandum of Agreement between the Department of the Interior and the Department of the Army.

Ms. Sallie Diebolt

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We are available to meet with you to discuss these issues. Please refer to file numbers 02EAAZ00-2015-I-0600 and 02EAAZ00-2015-CPA-0021 in any future contacts or correspondence. If we can be of further assistance, please contact Jason Douglas at 520-670-6150 (x226) or Jean Calhoun at 520-670-6050 (x223).

Sincerely,

Steven L. Spangle
Field Supervisor

cc (electronic):

Jean Calhoun, Assistant Field Supervisor, Fish and Wildlife Service, Tucson, AZ
Jason Brush, Wetlands Section Supervisor, Environmental Protection Agency,
San Francisco, CA

Chief, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ (pep@azgfd.gov)
Raul Vega, Regional Supervisor, Arizona Game and Fish Department, Tucson, AZ

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